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(71) Applicant: **SONY CORPORATION**
Tokyo (JP)

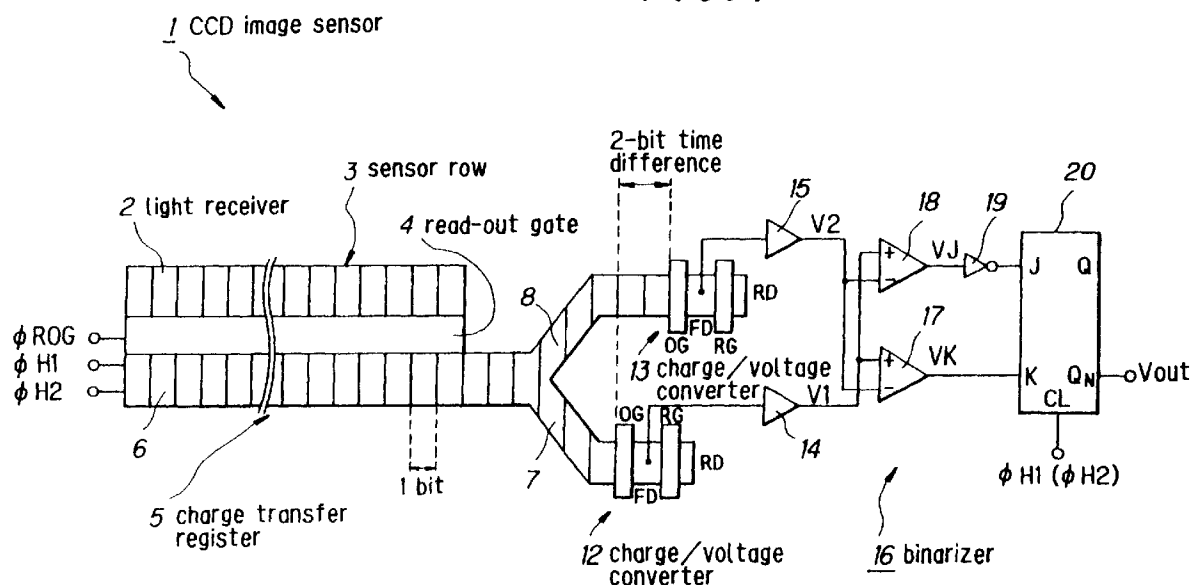
(72) Inventor: **Maki, Yasuhito, c/o Int. Prop. Div.,
Sony Corp.
Tokyo 141 (JP)**

(74) Representative: **Williams, Janice et al
D. Young & Co.,
21 New Fetter Lane
London EC4A 1DA (GB)**

(54) **Solid state image-sensing device and barcode reading device employing same**

(57) A solid-state image-sensor comprises a sensor (3), a charge transfer part (5), a plurality of charge/voltage converters (14,15), a comparator and a detector. The sensor has a plurality of arrayed light-receiving portions (2), with each light-receiving portion converting incident light into a signal charge corresponding to the amount of incident light and accumulating the signal charges. The charge transfer part distributes between at least two systems (7,8) the signal charge stored at

one light-receiving portion part of the sensor and transferring the signal charge using different numbers of stages. The plurality of charge/voltage converters detect and convert into voltages the signal charges of the at least two systems transferred by the charge transfer part. The comparator carries out a level conversion on each of the outputs of the plurality of charge/voltage converters and the detector detects the level transition point of the comparator output signal and generates a binary signal.

FIG. 1

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EUROPEAN SEARCH REPORT

Application Number

EP 95 30 3605

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 400 969 A (FUJITSU LTD) * column 6, line 18 - column 7, line 4; figure 3 *	1,3,8,10	G06K7/10 H01L27/148
A	EP 0 495 523 A (NIPPON ELECTRIC CO) * page 4, line 32 - line 35; figure 1 *	1,2,8,9	
A	EP 0 282 150 A (RANK CINTEL LTD) * page 3, line 52 - page 4, line 6; figure 4 *	1,2,8,9	
P,X	EP 0 628 924 A (SONY CORP) * column 9, line 52 - column 10, line 40; figure 3 *	1,3,8,10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G06K H01L
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		28 October 1997	Chiarizia, S
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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